REMARKS

In paragraphs 1 and 2 of the Office Action Applicant's election without traverse of species (1), i.e., FIGs. 4-7, in the reply filed on 6/19/06 is acknowledged, stating:

> "Claims 4, 6-8, 12, 14-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 6/19/06."

Applicant affirms its prior election of claims 1-3, 5, 9-11 and 13.

In paragraph 3 of the Office Action the disclosure is objected to because of the following informalities, stating:

> "(a) the description of FIG. 2, which was indicated as known Prior Art, in the specification, should be moved out of the "Detailed Description of the Preferred Embodiments" section and into "Background of the Invention" to avoid confusion of what really is applicant's invention; (b) page 8 of the specification should be filled in with appropriate application data for completeness; (c) the title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed, e.g. no method claims. Appropriate correction is required."

With regard to objection (a) Applicant respectfully traverses this ground of objection. Applicant believes that the invention disclosure is less confusing and more easily comprehended in its current format, wherein the prior art magnetic head features are discussed immediately prior to the features of the present invention. This patent application format is commonly utilized; for instance, the prior art reference to Kasiraj et al., 6,493,183, is presented in this format; specifically, prior art Figs. 1A and 1B are discussed in the beginning of the description of the preferred embodiments.

With regard to objection (b) Applicant has amended page 8 of the Specification accordingly.

With regard to objection (c) Applicant has amended the title accordingly.

In paragraph 4 of the Office Action claim 2 is objected to because of the following informality: (a) the reference to "induction coil" should be referred to "induction coil layer" for consistency. Appropriate correction is required.

Responsive hereto, and responsive to the rejections set forth below, Applicant has inserted the limitations of claim 2 into claim 1, and with particular reference to this ground of objection, Applicant has amended the reference to "induction coil" to be "induction coil structure." The

induction coil structure 62 is particularly described in the Specification, page 5, lines 19-23. Claim 2 has thereafter been cancelled. Applicant therefore respectfully submits that this ground of objection has been satisfied.

In paragraphs 5 and 6 of the Office Action claims 1, 2, 9, 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Kasiraj et al (US 6,493,183), stating:

> "(As per claims 1, 9 & 10) Kasiraj et al discloses a magnetic head, as shown mainly in FIGs. 2A-2B, including: a first magnetic pole P1/S2 having a portion thereof that is exposed at an air bearing surface (ABS) of the magnetic head; a second magnetic pole P2 including a pole tip thereof that is exposed at the ABS; a heating element 20 being disposed between the first magnetic pole and the pole tip; an induction coil layer "C" that is disposed between the first magnetic pole P1/S2 and the second magnetic pole P2, as shown in the noted figures (also refer to col. 4, line 35 to col. 5, line 13); (as per claim 2) wherein the heating element 20 is disposed between the induction coil "C" and the pole tip, such that the heating element 20 is not exposed outside these boundaries. It is noted that with respect to claim 9, the magnetic media 10 (Fig. 1 B) is known to have the capability to have magnetic bits written thereto as is known in the art. As to the head being a perpendicular type, Kasiraj et al is considered to encompass this type as well (see col. 4, lines 40-46)."

Responsive hereto, Applicant has amended independent claim 1 to include the limitation previously set forth in dependent claim 2, and dependent claim 2 has thereafter been cancelled; and Applicant has amended independent claim 9 to include the limitations previously set forth in dependent claim 10, and dependent claim 10 has thereafter been cancelled. Now, with regard to this rejection of amended independent claims 1 and 9, Applicant respectfully traverses this ground of rejection and asserts that amended independent claims 1 and 9 include limitations that are not anticipated by the teachings of Kasiraj et al. '183.

Firstly, with regard to Applicant's invention, as shown in Figs. 2 and 3, an induction coil structure 62 is fabricated above a first magnetic pole 60, wherein the induction coil structure includes induction coil turns 64 disposed within insulation 67, and wherein an insulating layer 69 is fabricated above the induction coil turns 64, as is set forth in the Specification, page 5, lines 19-23. Now with particular reference to Figs. 5 and 6 (and particularly Fig. 6) it is seen that Applicant's heater element 30 is fabricated above the electrical insulation layer 69 of the induction coil structure. It is further seen in Fig. 6 that the second magnetic pole members (probe layer 44 with pole tip 48, and shaping layer 160), are fabricated above the heating element 130. Therefore, the limitation that is recited in Applicant's amended impendent claims 1 and 9,

> "Wherein said heating element is disposed between said induction coil structure and said pole tip."

is fully supported by the Applicant's disclosure.

Now focusing on the teachings of Kasiraj et al. '183, and particularly Figs. 2B and 5B, it is seen that the heating element 2B (Fig. 2b) and/or 20' (Fig. 5B) is not disposed between the induction coil structure and the second magnetic pole tip (P2). Rather, the heating element 20 and 20' is disposed within the induction coil structure and even apparently beneath the coil turns "C". Therefore, Kasiraj et al. fails to anticipate the limitations of claims 1 and 9 that the heating element is disposed between the induction coil structure and the pole tip.

Applicant therefore respectfully submits that amended independent claims 1 and 9 recite limitations that are not taught by the cited prior art.

In paragraph 7 of the Office Action claims 3, 5, 11 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kasiraj et al in view of the applicant's admitted prior art (AAPA), i.e., FIGs. 2 & 3, stating:

> "For a description of Kasiraj et al, see the rejection, supra. With respect to claims 3 & 11, Kasiraj et al is silent as to the second magnetic pole including a shaping layer that is disposed in magnetic flux communication with the first magnetic pole, and a probe layer which includes the pole tip, wherein the probe layer is disposed in magnetic flux communication with the shaping layer. However, as shown in FIG. 2 of the AAPA (also refer to pages 5-7 of the instant application), the second magnetic layer includes a probe layer 68 with a pole tip 70. From this teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the single magnetic layer of the second pole to have included two layers, i.e., a shaping layer and a probe layer, as taught by the AAPA. The motivation would have been: configuring the one layered magnetic pole to have two layers, as discussed above, would have produced a magnetic head with favorable magnetic characteristics, and a high recording density, as would have been readily realized by a skilled artisan."

Responsive hereto, Applicant notes that claims 3, 5, 11 and 13 are each dependent, either directly or indirectly upon amended independent claim claims 1 or 10. Applicant respectfully submits that amended independent claims 1 and 10 are allowable, as is argued hereabove, and Applicant asserts that dependent claims 3, 5, 11 and 13 are likewise allowable in that they depend either directly or indirectly from an allowable base claim.

Having responded to all of the paragraphs of the Office Action, and having amended the claims accordingly, Applicant respectfully submits that the Application is now in condition for allowance. Applicant therefore respectfully requests that a Notice of Allowance be forthcoming at the Examiner's earliest opportunity. Should the Examiner have any questions or comments with regard to this amendment, a telephonic conference at the number set forth below is

respectfully requested.

Respectfully submitted,

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Patricia Beilmann
(Signature of Patricia Beilmann)